

REMARKS

- A. CLAIMS 3, 18-19, 21-22, 25-26, AND 28 ARE NONOBVIOUS UNDER 35 U.S.C. §103(A) OVER REUSMANN ET AL., U.S. 6,403,701, IN VIEW OF KAWAKAMI ET AL., EP 081994.

- A1. Claims 3, 18-19, 21-22, 25-26, AND 28 are nonobvious under 35 U.S.C. §103(a) over Reusmann et al., U.S. 6,403,701, in view of Kawakami et al., EP 081994 because the cited combination fails to provide a prima facie case of obviousness.

The PTO has maintained the rejection of independent claim 3 and all claims dependent thereon. It is the PTO's position that it would have been obvious to include the paper coating composition of the '994 application in the system of the '701 patent. Motivation for such a combination is said to be disclosed in the last paragraph of the Abstract of the '994 application, i.e., '...to make a coated paper which has good water resistance (due to the resin (Y)) whilst being receptive to rotary offset printing ink.' See *Office Action of November 5, 2003*.

Applicant greatly appreciates the detailed basis of rejection but must respectfully disagree.

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. MPEP 2143.

This standard is not met with the instant combination of references.

Reusmann is relied upon for its description of a mixer system, which includes (A) many water-free base colors and (B) a pigment-free aqueous component. See '701, *Abstract*. Component (A) contains less than 5% by wt of water, one coloring and/or special effect pigment, an organic solvent, a water thinnable or water-dispersible first binder and if desired auxiliaries and additives. See '701, *column 3, line 3 to column 5, line 47*. Component (B) comprises aqueous dispersion of polyurethane resin. See '701, *column 5, line 48 to column 11, line 62*.

It is the PTO's position that components A and B of Reusmann read respectively on base color (A1) and mixing varnish (B) of Applicant's instant claims 1, 2, and 3.

The PTO recognizes that the '701 patent does not disclose or suggest a composition comprising the combination of Applicant's components (A1) and (B) with a component (A2) that requires binder, pigment and water.

The PTO relies upon Kawakami to rectify this deficiency of the '701 patent. Per it's Abstract, the '994 application describes paper coating compositions that require a particular thermosetting resin, conventional pigment, binder and water.

As noted previously, it is the PTO's position that it would have been obvious to include the paper coating composition of the '994 application in the system of the '701 patent. Motivation for such a combination is said to be disclosed in the last paragraph of the Abstract of the '994 application, i.e., '...to make a coated paper which has good water resistance (due to the resin (Y)) whilst being receptive to rotary offset printing ink.'

Applicant greatly appreciates the detailed basis of rejection but must respectfully disagree.

Applicant's process of independent claim 3 requires the combination of an organic solvent based base color (A1), an aqueous base color (A2), and an aqueous pigment-free mixing varnish (B).

However, the cited combination fails to provide any suggestion or motivation to do what Applicant has done and obtain the claimed process requiring three separate and distinct modules.

A1a. Claim 3 is nonobvious over Reusmann et al., U.S. 6,403,701," in view of Kawakami et al., EP 081994 because the cited combination fails to provide any motivation to do what Applicant has done.

Applicant must respectfully disagree with the PTO's contention that the cited combination provides requisite motivation and submits that the cited combination fails to provide any suggestion to do what Applicant has done.

In particular, there is no motivation in the '994 application to combine its complete and 'stand alone' paper coatings of Examples 3-16 with the components of the '701 patent.

Rather, the teachings of the '994 application indicate that the disclosed paper

coatings containing filler pigments are complete and do not require admixture with any other components.

This is evidenced by the fact that the '994 application teaches that the total solids concentrations of the disclosed paper coating compositions should be from 30 to 80 weight %, preferably from 50 to 60 weight % and that such complete paper coating compositions provide adequate water resistance to paper substrates. *See page 9, lines 3-7 and pages 10-35, especially Examples 3-16.* It is noted that Part (1) of Examples 13-16 indicates that the prepared test coatings are complete paper coatings since they were adjusted to provide a final solids concentration of 55 wt%.

In fact, Applicant respectfully submits that the portion of the '994 Abstract relied upon by the PTO actually teaches away from Applicant's claimed invention and thus cannot provide motivation to do what Applicant has done.

A reference that leads one of ordinary skill in the art away from the claimed invention cannot render it unpatentably obvious. *Dow Chem. Co. v. American Cyanamid Co.* 2 U.S.P.Q.2d 1350 (Fed. Cir. 1987).

For example, the Federal Circuit has clearly stated that "each prior art reference must be evaluated as an entirety, and ...all of the prior art must be evaluated as a whole". *In re Fritch*, 23 U.S.P.Q.2d 1780, 1782 (Fed. Cir. 1992). And particularly on point, the CCPA had earlier said "[t]he test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art." *In re Keller*, 108 U.S.P.Q. 871, 881 (C.C.P.A. 1981).

One of skill in the art reading the entire '994 application, but especially Examples 3-16, would find that the disclosed paper coatings were not suitable for admixture with any other coating components. That is, the disclosed coatings are taught to provide acceptable water resistance simply by their sole application to a paper substrate. *See '994, last paragraph of Abstract.* This interpretation of the '994 application is supported by the working examples of the '994 application which clearly establish that desirable water resistance of paper substrates is obtained solely with the use of the disclosed paper coating compositions.

Moreover, it is respectfully submitted that the '994 application's teachings with respect to improved water resistance are confined to the advantages resulting from the use of the particularly disclosed thermosetting resin. This thermosetting resin results from the reaction of (a), (b), and a resin (Y) obtained by reacting (i), (ii), and (iii).

Nothing in the '994 application provides a reason to combine a solvent borne base color (A1) with a pigment free mixing varnish (B) and an aqueous color-imparting base color (A2). The PTO is encouraged to provide a citation to any such suggestion.

Instead, it is submitted that the motivation suggested by the PTO is apparent only with the benefit of the hindsight teachings of Applicant's Specification. A statement that modifications of the prior art to meet the claimed inventions would have "*well within the ordinary skill of the art* at the time the claimed invention was made" because the references teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references. *Ex parte Levengood*, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993); MPEP 2143.01.

Nothing in the '994 application suggests that the disclosed paper coating compositions should be combined with the solvent based composition (A2) and aqueous pigment free varnish (B) of the '701 reference. Rather, the teachings of the '994 application indicate that the disclosed compositions are intended to be wholly complete coatings in and of themselves. Nothing except Applicant's teachings suggest that they should be combined with components such as Applicant's (A1) and (B). The mere fact that references can be combined does not render the resultant combination obvious unless the *prior art* suggests the desirability of the combination. *In re Fritch*, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992), *emphasis added*.

The Supplemental Examiner's Answer of April 24, 2007 indicates that the cited combination provides sufficient motivation because

"...[t]he *prima facie* case of obviousness is that the addition water containing binder with color pigment is expected in the water-dilutable coating composition Reusmann invention to control the color effect and the desired solid content in the coating composition."

(Supplemental Examiner's Answer, page 10)

However, Applicants must respectfully ask which portions of either or both of the prior art references provide this 'expectation'?

Is it Reusmann which teaches that pigment should NOT be placed in a water based or aqueous binder composition but rather should be kept separate in an organic solvent based binder composition? Indeed, the overall import of Reusmann is that the water and water dispersible binder should be kept separate from the pigment containing components. If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 123 U.S.P.Q. 349 (CCPA 1959); MPEP 2143.01.

Applicants and the Undersigned fail to understand how the 'teachings away' of Reusmann can be ignored.

Moreover, the PTO has failed to explain how Kawakami's already diluted and finished water based coating could or would be expected to 'control the color effect' and 'desired solid content' in combination with Applicants' modules (I) and (III). That is, one of skill in the art would only expect that a high solids paste could provide such effects, rather than the 55% solids aqueous coating of Kawakami. Indeed, one of ordinary skill in the art would expect that attempts to control color and solids with the aqueous coating of Kawakami would result in an unbalance of one or both of these characteristics.

Accordingly, Applicants are currently preparing an Affidavit establishing that the Examiner's proposed motivation is contrary to the expectations and understandings of those of ordinary skill in the art.

Accordingly, Applicants must continue to submit that the cited combination fails to provide a *prima facie* case of obviousness as to the process of independent claim 3. In particular, the cited combination fails to provide any motivation to do what Applicant has done in the invention of independent claim 3.

Reconsideration and removal of the rejection is thus respectfully requested with respect to Applicant's independent claim 3 in view of the failure of the cited combination to disclose the motivation necessary for a *prima facie* case of obviousness under 35 U.S.C. §103(a).

- A2. Claims 18-19, 21-22, 25-26, and 28 are nonobvious under 35 U.S.C. §103(a) over Reusmann et al., U.S. 6,403,701, in view of Kawakami et al., EP 081994 because they incorporate the limitations of at least one independent claim.

Reconsideration and removal of the rejection as to dependent claims 18-19, 21-22, 25-26, and 28 is also requested, in as much as each one of these dependent claims incorporate the limitations of independent claims 3. Claim 3 is believed to nonobvious in view of the foregoing arguments set forth in Section A1 above, hereby incorporated by reference.

CONCLUSION

Applicant(s) respectfully submit that the Application and pending claims are patentable in view of the foregoing amendments and/or remarks. A Notice of Allowance is respectfully requested. As always, the Examiner is encouraged to contact the Undersigned by telephone if direct conversation would be helpful.

Respectfully Submitted,

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